REMARKS

Applicants thank the Examiner for allowing claims 24-39, 49-54, 59 and 104. Claims 40-46, 89-90, 95-96 have been canceled without prejudice or disclaimer. Claims 47, 48, 55-56, 60-61, 64, 76, 88, 94 and 100-103 have been amended. Specifically, claims 47 and 48 have been amended to no longer depend from claims 42 and 43. Claims 55-56, 60-61, 64, 76, 88, 94 and 100-102 have been amended to remove the phrase "upon ligand binding." Claims 88 and 94 have been amended to remove the phrase "binds an antibody specific for a polypeptide comprising the amino acid sequence of SEQ ID NO:2." Claim 103 has been amended to simply state that the claimed polypeptide must be at least 7 contiguous amino acids in length.

The amendments are fully supported by the specification and claims as originally filed, and thus no new matter has been added. Applicants respectfully request reconsideration of the rejections in view of the following remarks.

I. Rejections under 35 U.S.C. §112, first paragraph

A. Claims 88, 90-94, 97-99 and 102

Claims 88, 90-94, 97-99 and 102 are rejected as allegedly lacking enablement in the specification as filed. Regarding the requirement in these claims that the claimed polypeptide binds an antibody specific for the polypeptide of SEQ ID NO:2, the Examiner states:

> Claim 90 had previously not been rejected for this limitation; however, upon further consideration, this limitation is not sufficient to enable the claims... Because claims 88 and 94 have the limitation of binding an antibody specific for a polypeptide encoded by the cDNA in ATCC Deposit No. 209691 or 209641 as an alternative limitation from that of stimulating the differentiation and/or proliferation of immune cells, such polypeptides are not required to have the latter activities, and the specification has not taught how to use polypeptides that do not have those activities.
> *See* page 3 of the Office Action dated November 5, 2003.

The above recited claims have additionally been rejected for allegedly lacking written description in the specification. Specifically, the Examiner states on page 4, section 6.2 of the Office Action dated November 5, 2003:

> [T]he specification does not have a definition for an antibody "specific" for a polypeptide. Therefore, a reasonable art accepted definition would be an antibody that binds with specificity to a polypeptide binds to a

> particular epitope, but such an epitope may also be present on an unrelated protein, and therefore a polypeptide that binds an antibody specific for a polypeptide comprising a polypeptide of SEQ ID NO:2 does not meet the written description guidelines.
> *See* page 4 of the Office Action dated November 5, 2003.

Applicants respectfully disagree and maintain that the above rejected claims were fully enabled and supported by written description in the application as originally filed. However, claim 90 has been canceled and claims 88 and 94 have been amended to remove the requirement that the claimed polypeptide binds an antibody specific for the polypeptide of SEQ ID NO:2. These amendments have been made solely in the interest of facilitating prosecution and Applicants reserve the right to pursue canceled subject matter in future, continuing applications. Applicants feel that these amendments overcome the Examiner's rejections and, thus, respectfully request that these rejections under U.S.C. §112, first paragraph be reconsidered and withdrawn.

B. Claims 55, 56, 60, 61, 64-79, 81-83 and 85-102

Claims 55, 56, 60, 61, 64-79, 81-83 and 85-102 are rejected as lacking written description in the specification as originally filed. The Examiner states in section 3.3 on pages 3-4 of the Office Action dated November 5, 2003 that these claims are rejected because they recite the term "upon ligand binding." The Examiner specifically states that

> Applicants point to pages 37, 96 and 147 in the specification as providing support this term, however there is no ligand known or disclosed for this receptor, and therefore the specification lacks written description for this limitation. This rejection would be withdrawn if the term "upon ligand binding" were deleted.

Applicants respectfully disagree.

It is clearly stated throughout the specification, for example, on page 1, lines 10-11, that the CRCGCL polypeptide of the invention is a receptor polypeptide. As such, it would be obvious to one of skill in the art that CRCGCL must be expressed by a cell and bound to a ligand in order to elicit the proliferative effects of native CRCGCL. That ligand binding is required in order to activate receptor signaling is an inherent quality of cytokine receptors and other cell surface receptors, as discussed on page 1, lines 21-27 of the specification. On page 147, lines 3-12 of the specification it is additionally stated that the Jak-STAT signal transduction pathway is activated upon binding of ligand to CRCGCL. It is further stated in the last paragraph on page 37 of the specification that CRCGCL polypeptides of the

invention include fragments that retain the ability to bind CRCGCL receptor ligand, and lines 19-25 of page 38 further discuss methods of assaying CRCGCL receptor-ligand binding. Ligand binding to CRCGCL is additionally mentioned on page 19, lines 14-16, which states that CRCGCL functional activity can routinely be measured by determining the ability of a CRCGCL polypeptide to bind a CRCGCL ligand. Each of these disclosures further supports the fact that ligand binding to CRCGCL, in addition to being inherently necessary for CRCGCL proliferative activity, was clearly contemplated and described in the specification. However, solely in the interest of expediting prosecution, claims 89 and 95 have been canceled and claims 55-56, 60-61, 64, 76, 88, 94 and 100-102 have been amended to delete the phrase "upon ligand binding" thus obviating this rejection. Applicants reserve the right to pursue canceled subject matter in subsequent continuing applications. Applicants submit that although the phrase "upon ligand binding" is no longer included in the above listed claims, the requirement that CRCGCL be both expressed by a cell and bound to ligand in order to stimulate cell proliferation and/or differentiation is inherent and implied. In light of these amendments, Applicants respectfully request that this rejection be reconsidered and withdrawn.

III. Rejections under 35 U.S.C. §112, second paragraph

Claims 40-48 and 103 are rejected as allegedly being indefinite. Specifically, the Examiner states that these claims encompass a polypeptide that could consist of a single amino acid. See section 4 on page 5 of the Office Action dated November 5, 2003. Applicants respectfully disagree and maintain that previous claims 40 and 103 were clearly worded to recite polypeptides that were 7 or more amino acids in length as a claim limitation. Nevertheless, in the interest of facilitating prosecution, claims 40-56 have been canceled, and claims 47 and 48 have been amended to no longer depend from claims 42 and 43. Claim 103 has been amended to remove the phrase "comprising residues 1 to n of SEQ ID NO:2, where n is an integer in the range of +2 to +371, and." In light of these amendments, Applicants respectfully request that this rejection be reconsidered and withdrawn.

CONCLUSION

In view of the foregoing amendments and remarks, Applicants believe that this application is now in condition for allowance.

If there are any fees due in connection with the filing of this paper, please charge the fees to our Deposit Account No. 08-3425. If a fee is required for an extension of time under 37 C.F.R. § 1.136 not accounted for above, such an extension is requested and the fee should also be charged to our Deposit Account.

Respectfully submitted,

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